

Abstract of the Disclosure

An air filtration and sterilization system for removing airborne contaminants from air circulated through an air plenum system of a fireplace. Air filtration systems may include particulate, chemical, and ion filtration systems to filter the
5 air. Air sterilization may include ultraviolet, ozone, germicidal coating, and channeled system of ducts systems to sterilize the air. Systems may be used individually or in combination. In addition, optional components, including a warning sensor for indicating when to replace a filter, an automatic initiation sensor for activating and stopping filtration and sterilization, and an air enhancement system for introducing desirable
10 materials into the air, may be provided.

